

PRO-WILD: Protect and Promote Crop Wild Relatives

Problem

Modern crop varieties often lack genetic diversity, leaving them vulnerable to climate change, pests and diseases and not well adapted to novel agricultural practices. Many valuable traits that could improve nutritional quality and resilience to biotic and abiotic stresses still exist in crop wild relatives (CWRs). However, many of these species are under threat due to habitat loss and fragmentation, as well as limited integration into breeding programmes.

Solution

The PRO-WILD project identifies, protects and promotes the use of CWRs, with a focus on wheat, sugar beet and brassicas. The project maps genetic diversity hotspots, assesses threats to CWR populations and develops tools for integrating them into breeding programmes. It also establishes conservation actions *in-situ* (in the wild) and *ex-situ* (in gene banks).

Benefits

- The project will enhance the availability of genetic traits that can improve climate resilience and nutritional value.
- Supports more stable agricultural production under climate stress.
- Strengthens biodiversity conservation and the genetic foundation of food security.
- Encourages cooperation between plant breeders, conservationists, and policymakers.

Principle

Safeguarding and utilising the genetic diversity found in CWRs can make agriculture more adaptive and sustainable. Conserving CWRs is not only an environmental action, but also a strategic investment in the future resilience of European food systems.

Project details

Theme: Biodiversity conservation, sustainable agriculture

Geographical coverage: Europe and Middle East

Project duration: 5 years, 2024-2029

Period of impact: Long-term, contributing to sustained agricultural resilience

Funding:

- Horizon Europe: European Union's Research and Innovation program
- UK Research and Innovation
- Swiss State Secretariat for Education, Research and Innovation

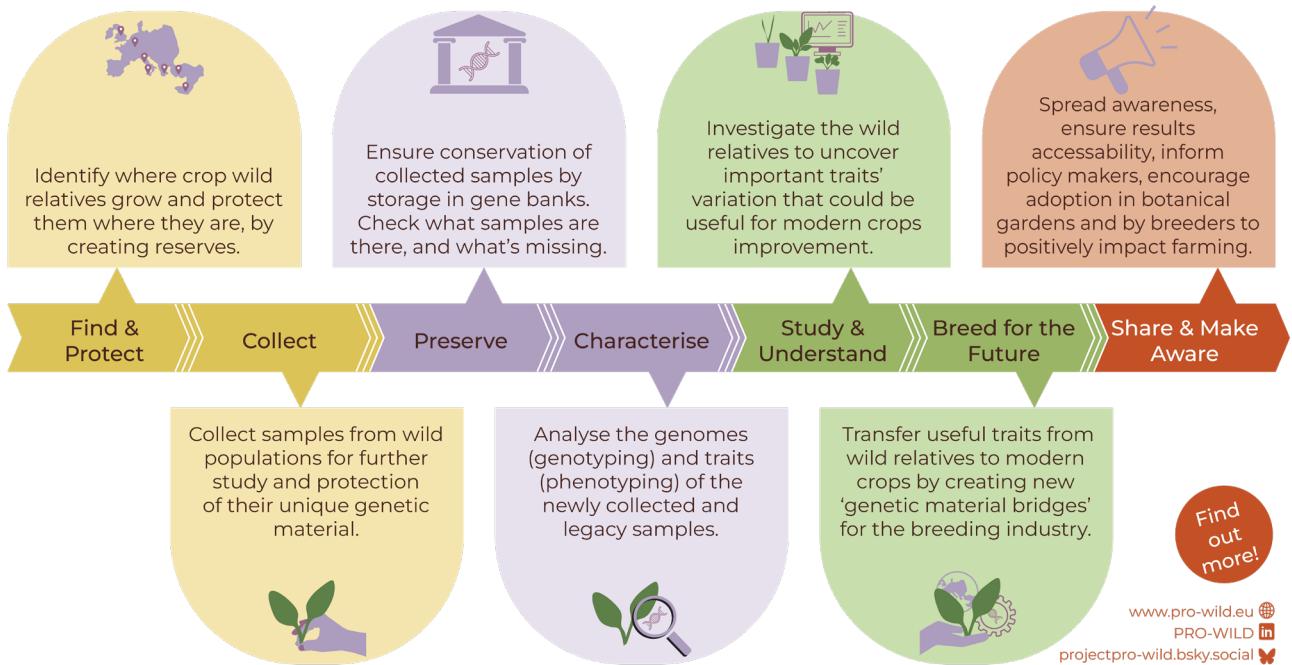
Call: Biodiversity and Ecosystem Services, HORIZON-CL6-2023-BIODIV-01

Topic: Crop wild relatives for sustainable agriculture, HORIZON-CL6-2023-BIODIV-01-13

Grant agreement: No 101134965

Coordinator:

Dr Jacques Le Gouis
National Research Institute for Agriculture, Food and Environment INRAE
5 chemin de Beaulieu
63000 Clermont-Ferrand, France
Tel: +33(0)4-43-76-15-72
Email: jacques.le-gouis@inrae.fr



This infographic illustrates PRO-WILD's key activities centred on the wild relatives of wheat, sugar beet and brassicas. The yellow boxes represent *in-situ* conservation efforts, the purple boxes indicate *ex-situ* conservation activities and the green boxes cover fieldwork, laboratory research and data science applications.

Further reading

- Kell, S.P., Ford-Lloyd, B.V., Brehm, J.M., Iriondo, J.M. and Maxted, N. (2017). Broadening the Base, Narrowing the Task: Prioritizing Crop Wild Relative Taxa for Conservation Action. *Crop Science*, 57: 1042-1058. <https://doi.org/10.2135/cropsci2016.10.0873>
- European Commission: Directorate-General for Environment, IUCN (International Union for Conservation of Nature), IUCN. Species Survival Commission, Maxted, N., Bilz, M., Lansdown, R. V., & Kell, S. P. (2011). European red list of vascular plants, Publications Office. <https://data.europa.eu/doi/10.2779/8515>
- PRO-WILD project website: www.pro-wild.eu
- Sister projects' websites: www.cousinproject.eu, www.fruitdiv.eu

About this practice abstract and PRO-WILD

Publisher: Research Institute of Organic Agriculture FiBL
 Authors: Nina Gallmann, Elsa Kanner (both FiBL)
 Contact: nina.gallmann@frib.org
 Review: Jacques Le Gouis (INRAE), Helga Willer (FiBL)
 Permalink: <https://zenodo.org/records/15680259>

This practice abstract was elaborated in the PRO-WILD project, based on the EIP AGRI practice abstract format.
 Header image by Hakan Özkan (Cukurova University)
 © 2025

PRO-WILD: The project 'Protect and Promote Crop Wild Relatives - PRO-WILD' is running from September 2024 to August 2029. The overall goal of PRO-WILD is to protect and promote crop wild relatives (CWRs) to enhance the resilience of agriculture to climate change and other environmental and anthropogenic stresses. The project focuses particularly on wild relatives of wheat, sugar beet, and brassicas. It aims to strengthen both *in-situ* and *ex-situ* conservation, identify valuable genetic traits, and facilitate the use of these resources in breeding programs for future-proof agriculture.

Project website: www.pro-wild.eu

Funding



**Funded by
the European Union**



**UK Research
and Innovation**

Project funded by



Schweizerische Eidgenossenschaft
 Confédération suisse
 Confederazione Svizzera
 Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
 Education and Research EAER
 State Secretariat for Education,
 Research and Innovation SERI